## WHAT IS CLAIMED IS:

SUB A 1. Alkali-free aluminoborosilicate glass having a coefficient of thermal expansion  $\alpha_{20/300}$  of between 2.8 x  $10^{-5}/K$  and 3.8 x  $10^{-6}/K$ , which has the following composition (in % by weight, based on oxide):

SiO <sub>2</sub>	> 58 - 65
$B_2O_3$	> 6 - 10.5
Al <sub>2</sub> O <sub>3</sub>	> 14 - 25
MgO	0 - < 3
CaO	0 - 9
SrO	0.1 - 1.5
BaO	> 5 - 8.5
with SrO + BaO	≤ 8.6
with MgO + CaO + SrO + BaO	8 - 18
ZnO	0 - < 2

- 2. Aluminoborosilicate glass according to Claim 1, characterized in that it comprises at least 18% by weight, preferably more than 18% by weight, of  $A1_20_3$ .
- 3. Aluminoborosilicate glass according to Claim 1 or 2, characterized by the following composition (in % by weight, based on oxide):

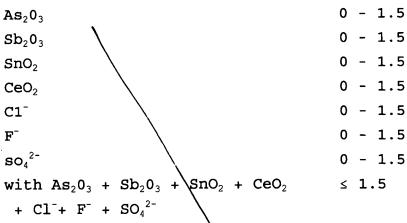
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58 - 64.5
SiO<sub>2</sub>
                                                - 10.5
B_2O_3
                                                  24
Al_2O_3
                                          > 18
MgO
                                          0 - < 3
                                          1 - < 8
CaO
SrO
                                          0.1 - 1.5
BaO
                                          > 5 - 8
with SrO + BaO
                                          < 8.5
with MgO + CaO + SrO + BaO
                                          8 - 18
                                          0 - < 2
ZnO
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- Aluminoborosilicate glass according to at least one of 4. Claims 1 to 3, characterized in that it comprises at least 20.5% by weight of  $Al_2O_3$ .
- Alkali-free aluminoborosilicate glass having a coefficient of thermal expansion  $\alpha_{20/300}$  of between 2.8 x  $10^{-6}/K$  and 3.6 x  $10^{-6}$ 6/K, which has the following composition (in % by weight, based on oxide):

SiO <sub>2</sub>	> 58 - 64.5
$B_{2}O_{3}$	> 6 - 10.5
<b>A1</b> <sub>2</sub> <b>0</b> <sub>3</sub>	20.5 - 24
MgO	0 - < 3
CaO	2.5 - < 8
sro	0.1 - 3.5
BaO	> 5/- 7 5
with SrO + BaO	// ≤/8.6
with MgO + CaO + SrO + E	BaO //8 - 18
ZnO	0 - < 2

- Aluminoborosilicate glass according to at least one of Claims 1 to 5, characterized in that it comprises at least 21.5% by weight of  $Al_2O_3$ .
- Aluminoborosilicate glass according to at least one of Claims 1 to 6, characterized in that it comprises more than 8% by weight of  $B_2O_3$ .
- Aluminoborosilicate glass according to at least one of Claims 1 to 7, characterized in that it comprises at least 0.1% by weight of ZnO.
- Aluminoborosilicate glass according to at least one of Claims 1 to 8, characterized in that it additionally comprises:

0 - 2  $ZrO_2$ 0 - 2  $TiO_2$ with ZrO<sub>2</sub> + TiO<sub>2</sub> 0 - 2



- 10. Aluminoborosilicate glass according to at least one of Claims 1 to 9, characterized in that it is free of arsenic oxide and antimony oxide, apart from unavoidable impurities, and that it can be produced in a float plant.
- 11. Aluminoborosilicate glass according to at least one of Claims 1 to 10, which has a coefficient of thermal expansion  $\alpha_{20/300}$  of 2.8 x  $10^{-6}/K$  3.6 x  $10^{-6}/K$ , a glass transition temperature Tg of > 700°C and a density  $\rho$  of < 2.600 g/cm<sup>3</sup>.
- 12. Use of the aluminoborosilicate glass according to at least one of Claims 1 to 11 as substrate glass in display technology.

  13. Use of the aluminoborosilicate glass according to at least
- one of Claims 1 to 11 as substrate glass in thin-film photovoltaics.